

Amendments to the Claims:

The following listing replaces all prior listing of claims in the application.

Listing of Claims:

CLAIMS

1. (Currently amended) ~~A Method~~ method of fabricating a stackeded structure comprising:
 - a) selecting a first plate and a second plate such that a portion of at least one of the first and second plates has a structured surface,
 - b) producing a sacrificial layer on at least a portion of the ~~structured surface of the first plate or the structured surface of the second plate,~~
 - c) bonding the ~~two first and second plates together~~ by bonding the sacrificial layer to a remaining first or second plate,
wherein the structured surface contacts the sacrificial layer.
2. (Previously presented) The method according to claim 1 wherein producing the sacrificial layer comprises producing at least a portion of the structured surface of the first plate and at least a portion of the structured surface of the second plate.
3. (Previously presented) The method according to claim 1, wherein selecting a first plate and a second plate comprises selecting plates having predetermined physical-chemical properties.
4. (Previously presented) The method according to claim 1 wherein selecting comprises selecting the surface having a roughness greater than a predetermined threshold.

5. (Previously presented) The method according to claim 4 wherein selecting further comprises selecting the structured surface wherein the predetermined threshold is approximately 0.2 nm root-mean-square (RMS).
6. (Previously presented) The method according to claim 1 wherein selecting comprises selecting a least one of the plates that initially includes a surface layer.
7. ((Previously presented)) The method according to claim 6, wherein selecting further comprises selecting at least one of the plates wherein the surface layer comprises a monocrystalline surface layer.
8. (Previously presented) The method according to claim 6 wherein selecting further comprises selecting at least one of the plates wherein the surface layer comprises silicon.
9. (Previously presented) The method according to claim 6 further comprising structuring the surface by forming the surface layer having predetermined properties.
10. (Previously presented) The method according to claim 9 where structuring the surface comprises structuring the surface because of a physical-chemical property of that surface layer.
11. (Previously presented) The method according to claim 9 wherein forming the surface layer comprises forming a layer of silicon nitride.
12. (Previously presented) The method according to claim 1 further comprising smoothing at least one of a free surface of the sacrificial layer or a free surface of at least one of the plates before the bonding.
13. (Previously presented) The method according to claim 1 further comprising smoothing the free surface of the sacrificial layer and the free surface of at least one of the plates before the bonding.

14. (Previously presented) The method according to claim 1 wherein bonding comprises molecular bonding.

15. (Previously presented) The method according to claim 1 wherein bonding comprises bonding with a sacrificial bonding agent.

16. (Previously presented) The method according to claim 1 wherein bonding further comprises bonding assisted by at least one of a mechanical means a plasma treatment a thermal treatment.

17. (Previously presented) The method according to claim 1 wherein the method further comprises applying a selected atmosphere before bonding.

18. (Previously presented) The method according to claim 16 wherein assisting further comprises applying a selected atmosphere during bonding.

19. (Previously presented) The method according to claim 16 wherein bonding further comprises exposing the two plates to an open air environment before bonding.

20. (Previously presented) The method according to claim 16 wherein bonding further comprises bonding in an open air environment.

21. (Previously presented) The method according to claim 1 further comprising thinning at least one of the first or second plates after bonding.

22. (Previously presented) The method according to claim 1 wherein a major portion of at least one of the plates comprises a semiconductor material.

23. (Previously presented) The method according to claim 22 wherein the major portion comprises silicon.

24. (Previously presented) The method according to claim 1 wherein the sacrificial layer comprises silicon oxide.

25. (Previously presented) The method according to claim 1 wherein the sacrificial layer comprises a polymer.

26. (Previously presented) A stacked structure fabricated by a method according to claim 1.

27. (Currently amended) A stacked structure comprising a sacrificial layer between a first substrate and a second substrate wherein at least a portion of at least one of the first or second substrates comprises a structured surface, wherein the structured surface comprises a surface having a roughness greater than a predetermined threshold.

28. (Previously presented) A stacked structure according to claim 27 wherein the structured surface comprises a surface having predetermined physical-chemical properties.

29. (Cancelled)

30. (Previously presented) A stacked structure according to claim 29 wherein the predetermined threshold is approximately 0.2 nm.

31. (Previously presented) A stacked structure according to claim 27 wherein at least one of the first or second substrates has a surface layer.

32. (Previously presented) A stacked structure according to claim 31 wherein the surface layer comprises a monocrystalline surface layer.

33. (Previously presented) A stacked structure according to claim 31 wherein the surface layer comprises silicon.

34. (Previously presented) A stacked structure according to claim 31 wherein the surface layer by comprises a material having predetermined physical-chemical properties.

35. (Previously presented) A stacked structure according to claim 34 wherein the surface layer comprises silicon nitride.

36. (Previously presented) A stacked structure according to claim 27 wherein a major portion of at least one of the first or second substrates comprises a semiconductor material.

37. (Previously presented) A stacked structure according to claim 36 wherein the major portion comprises silicon.

38. (Previously presented) A stacked structure according to claim 27 wherein the sacrificial layer comprises silicon oxide.

39. (Previously presented) A stacked structure according to claim 27 wherein the sacrificial layer comprises a polymer.

40. (Previously presented) A stacked structure according to claim 27 wherein at least one of the first or second substrates comprises a thin layer.

41. (New) (Previously presented) The method according to claim 1 further comprising producing a supplemental sacrificial layer on the remaining first or second plate.